

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 10326-79PCT	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/CA 03/01606	International filing date (day/month/year) 21/10/2003	(Earliest) Priority Date (day/month/year) 23/10/2002
Applicant PULP AND PAPER RESEARCH INSTITUTE OF CANADA		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No.

PC 03/01606

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 D21C9/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D21C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02 25007 A (PULP PAPER RES INST ;HU THOMAS Q (CA)) 28 March 2002 (2002-03-28) cited in the application the whole document ---	1-29
A	US 5 318 851 A (BARON ARTHUR L ET AL) 7 June 1994 (1994-06-07) cited in the application the whole document ---	1-29
A	US 2002/056534 A1 (THOMAS HU Q) 16 May 2002 (2002-05-16) the whole document ---	1-29
A	US 2002/124980 A1 (HEITNER CYRIL ET AL) 12 September 2002 (2002-09-12) the whole document ---	1-29
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

16 March 2004

Date of mailing of the international search report

26/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Karlsson, L

INTERNATIONAL SEARCH REPORT

International Application No

PO 03/01606

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 23117 A (VALTION TEKNILLINEN ;VIIKARI LIISA (FI); BUCHERT JOHANNA (FI); KRU) 14 May 1999 (1999-05-14) the whole document -----	1-29

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/A 03/01606

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0225007	A	28-03-2002	AU 9155101 A	02-04-2002
			WO 0225007 A2	28-03-2002
			CA 2421397 A1	28-03-2002
			US 2002056534 A1	16-05-2002
US 5318851	A	07-06-1994	US 5213897 A	25-05-1993
			BR 9201114 A	24-11-1992
			CA 2060021 A1	04-10-1992
			EP 0507333 A2	07-10-1992
			JP 6122755 A	06-05-1994
			MX 9201519 A1	01-10-1992
US 2002056534	A1	16-05-2002	AU 9155101 A	02-04-2002
			WO 0225007 A2	28-03-2002
			CA 2421397 A1	28-03-2002
US 2002124980	A1	12-09-2002	US 6500303 B1	31-12-2002
			US 6254724 B1	03-07-2001
			AU 723502 B2	31-08-2000
			AU 9066098 A	16-02-1999
			BR 9811525 A	05-09-2000
			CA 2295631 A1	04-02-1999
			CN 1270580 T	18-10-2000
			WO 9905108 A1	04-02-1999
			EP 1000032 A1	17-05-2000
			JP 2001510881 T	07-08-2001
			TW 460641 B	21-10-2001
			ZA 9806521 A	25-01-1999
WO 9923117	A	14-05-1999	FI 974139 A	05-05-1999
			AU 1035199 A	24-05-1999
			WO 9923117 A1	14-05-1999